

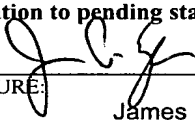
FORM PTO 1390 (REV 10-2003)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER 30848/40323
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/502465</b>
INTERNATIONAL APPLICATION NO. PCT/GR03/00003	INTERNATIONAL FILING DATE 16 January 2003	PRIORITY DATE CLAIMED 24 January 2002	
TITLE OF INVENTION Low Power Silicon Thermal Sensors and Microfluidic Devices Based on the Use of Porous Sealed Air Cavity Technology or Microchannel Technology			
APPLICANT(S) FOR DO/EO/US Androula G. Nassiopoulou			

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
- ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing 35 U.S.C. 371.
- ☒ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.
- ☐ The US has been elected (Article 31).
- ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - ☒ is attached hereto (required only if not communicated by the International Bureau).
  - ☒ has been communicated by the International Bureau.
  - ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
- ☐ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - ☐ is attached hereto.
  - ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
- ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - ☐ are attached hereto (required only if not communicated by the International Bureau).
  - ☐ have been communicated by the International Bureau.
  - ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - ☒ have not been made and will not be made.
- ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
- ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
- ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

- ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
- ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
- ☐ A preliminary amendment.
- ☐ An Application Data Sheet under 37 CFR 1.76.
- ☐ A substitute specification.
- ☐ A power of attorney and/or change of address letter.
- ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
- ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
- ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
- ☒ Other items or information: International Serach Report; return receipt postal card

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
10/502465		PCT/GR03/00003		30848/40323	
21. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS PTO USE ONLY	
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):					
<input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO . . . . . \$1080.00					
<input checked="" type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO . . . . . \$920.00					
<input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO . . . . . \$770.00					
<input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) . . . . . \$730.00					
<input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) . . . . . \$100.00					
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$ 920.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).				\$	
CLAIMS		NUMBER FILED	NUMBER EXTRA	RATE	
Total claims		10-20 =		x	\$ 0.00
Independent claims		1-3 =		x	\$ 0.00
MULTIPLE DEPENDENT CLAIM(s) (if applicable)				+	\$
TOTAL OF ABOVE CALCULATIONS =				\$ 920.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ 460.00	
SUBTOTAL =				\$ 460.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).				\$	
TOTAL NATIONAL FEE =				\$ 460.00	
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+ \$	
TOTAL FEES ENCLOSED =				\$ 460.00	
				Amount to be refunded: \$	
				charged: \$	
a. <input checked="" type="checkbox"/> A check in the amount of \$ 460.00 to cover the above fees is enclosed.					
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 13-2855. A duplicate copy of this sheet is enclosed.					
d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO:					
James P. Zeller MARSHALL, GERSTEIN & BORUN LLP 233 S. Wacker Drive, Suite 6300 Sears Tower Chicago, Illinois 60606-6357 (312) 474-6300			SIGNATURE:  James P. Zeller NAME 28,491 REGISTRATION NUMBER		
CUSTOMER NUMBER: 04743					

PATENT

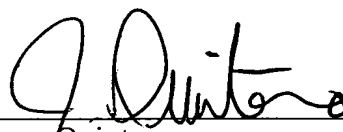
**IN THE UNITED STATES PATENT  
AND TRADEMARK OFFICE**

Applicant: Androula G. Nassiopoulou	)	For: LOW SILICON THERMAL SENSORS
	)	AND MICROFLUIDIC DEVICES BASED
U.S. National Phase of	)	ON THE USE OF POROUS SILICON
PCT/GR03/00003 filed January 16,	)	SEALED AIR CAVITY TECHNOLOGY OR
2003	)	MICROCHANNEL TECHNOLOGY
	)	
Filed: Herewith	)	Group Art Unit: To be assigned
	)	
	)	Examiner: To be assigned

**CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that the attached four items (a) through (d) are being deposited with the United States Postal Service on July 23, 2004, in a postage-paid envelope addressed to Commissioner for Patents, Mail Stop PCT, P.O. Box 1450, Alexandria, VA 22313-1450, utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Mailing Label No. EV323769347US.

- (a) Transmittal letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. §371;
- (b) Application, including seven sheets of description, four sheets of claims, and six sheets of drawings;
- (c) Declaration/power of attorney; and
- (d) International Search Report.

  
\_\_\_\_\_  
Juan Quintero